Name:

Date:

1. Suppose you choose a random U.S. resident over the age of 25. The table below is a probability model for the education level the selected person has attained, based on data from the American Community Survey from 2006 – 2008.

|  |  |
| --- | --- |
| **Education level attained** | **Probability** |
| No high school diploma | 0.20 |
| High School diploma or GED | 0.22 |
| Some college | 0.29 |
| Bachelor’s degree | 0.19 |
| Graduate or professional degree | ? |

* 1. What is the probability that a randomly selected person has a graduate or professional degree?
  2. What is the probability that a randomly-selected person has **at least** a high school diploma?

1. Below is a two-way table that describes the responses of 120 subjects to a survey in which they were asked, “Do you exercise for at least 30 minutes four or more times per week?” and “What kind of vehicle do you drive?”  
     
   1. List two mutually exclusive (disjoin) events for this situation.
   2. What percent of people drive an SUV?
   3. What percent of exercisers drive a sedan?
   4. What is the probability that someone drives a truck **given that** they do not exercise?
   5. Are exercise and car type independent?
   6. What percent of people drive **either** a sedan **or** a truck?
   7. What percent of people drive a truck **or** exercise four or more times per week?
2. The table below gives the counts (in thousands) of earned degrees in the United States in a recent year, classified by level and the gender of the degree recipient.  
     
   1. What are two mutually exclusive events for this situation?
   2. What percent of students earned a Master’s degree?
   3. What percent of students are either female **or** earned a Master’s degree?
   4. What percent of students are **both** female **and** earned a Master’s degree?
   5. What percent **of** females earned a Master’s degree?
   6. What percent **of** people who earned Master’s degrees were female?